# DATA ITEM DESCRIPTION

Form Approved OMB No. 0704-0188

2. TITLE

Level of Repair Analysis (LORA) Program Plan

1. IDENTIFICATION NUMBER DI-ILSS-80654

3. DESCRIPTION/PURPOSE

3.1 This plan identifies and describes the contractor's LORA program; how, when, by whom, and on what LORA will be conducted. This plan also describes the specific techniques to be used and tasks to be performed along with their (Continued on Page 2)

4. APPROVAL DATE (YYMMDD)

S. OFFICE OF PRIMARY RESPONSIBILITY (OPR)

64. DTIC APPLICABLE | 66. GIDEP APPLICABLE

A/AMXMD-EL 880729

7. APPLICATION/INTERRELATIONSHIP

- 7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.
- 7.2 This DID is applicable whenever a contractor is required to conduct a LORA or provide data to the government for a LORA.

(Continued on Page 2)

8. APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

A4497

#### 10. PREPARATION INSTRUCTIONS

- 10.1 General. The Level of Repair Analysis (LORA) program plan shall describe, in detail, how and when the contractor's LORA program will be conducted to meet program requirements.
- 10.2 <u>Format</u>. The LORA program plan shall be in the contractor's format.
- 10.3 Contents. The LORA program plan shall include the following:
- 10.3.1 Identification and description of the overall system or equipment under contract for analysis.
- 10.3.2 Identification of the contractor preparing the LORA program plan, the government organization contracting for the LORA program plan, and the contract number.
- 10.3.3 Identification of the internal organizational structure performing the LORA.
- 10.3.4 Description of the interrelationship of the LORA discipline with other Logistic Support Analysis (LSA) elements and system engineering disciplines. (Continued on page 2)

# 11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

# Block 3, Description/Purpose (Continued)

development and integration into the overall LSA program and other related programs.

- 3.2 The principal uses for this plan are to provide the government a basis for review and evaluation of the contractor's proposed LORA program and its proposed components; for establishing contractual LORA compliance requirements; and, for providing the milestone schedule or study plan schedule indicating when the LORA will be initiated and completed.
- 3.3 This plan is the basic tool used to establish and execute an effective LORA program. When submitted as a response to a solicitation document, it is used in the source selection process.

# Block 7, Application/Interrelationship (Continued)

- 7.3 The LORA program plan is self-supporting but may form a part of the Logistic Support Analysis Plan.
- 7.4 The LORA program plan is submitted in response to a solicitation document. The LORA program plan, as approved or modified by the government, is then incorporated into the contract and will be the basis for contractual compliance. After the award of the contract, the LORA program plan is updated by the contractor. The LORA program plan is then updated during contract execution, under government approval, as required based on analysis results, program schedule modifications, and program decisions.
- 7.5 This DID is used in conjunction with DI-ILSS-80655, LORA Report.

# Block 10, Preparation Instructions (Continued)

- 10.3.5 Description of the method by which LORA information that affects design is disseminated to equipment designers, and the criteria which will be used to guide the designers on the advisability of designing items for discard-at-failure or repairability.
- 10.3.6 Description of the procedures which will be used for collecting, updating, and validating LORA input data and final LORA decisions. The description includes:
- a. Procedures for integration and monitoring implementation of the LORA decisions into the system support requirements and logistic planning.
- b. Procedures for updating inputs to the LORA with data and results from contractor testing, logistic demonstrations, developmental testing, and operational testing.

Block 10, Preparation Instructions (Continued)

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- 10.3.7 Delineation of the tasks and milestone schedules required to conduct the LORA program, along with schedule relationships to schedules of other LSA program requirements, and associated system engineering activities.
- 10.3.8 Description of each LORA program task's relationship to other LSA program events, and its integration into the LSA program schedule to ensure that LORA tasks are completed prior to other LSA activities requiring LORA results.
- 10.3.9 Identification and description of the LORA model or models to be used for conducting LORA(s), and the class(es) of LORA that will be performed. A LORA model is defined as a computerized or manual mathematical model or technique used to compare the relative economics and performance levels of the viable repair or discard options. There are three classes of LORA which include: system or end item analysis; subsystem or item analysis; and, specific aspects of repair analysis.
- 10.3.10 A list that identifies the specific items that make up the overall system or equipment under contract for LORA. The list includes items recommended for analysis, items not recommended for analysis, and rationale for selection or non-selection. The list is consistent with the LSA control number structure of the LSAR, when LSAR is on contract.
- 10.3.11 Identification of any previous systems, similar to the system under analysis, along with their support structure and their past LORAs that are to be used to establish the baseline for the support structure constraints on the system under analysis.
- 10.3.12 A discussion, to include reasons and justifications, for any non-economic considerations that may impact or should be considered in adjusting decision alternatives derived from the economic considerations.
- 10.3.13 A description of how the LORA results will be used to assist in developing or revising system engineering and logistic products or data with the following programs:
  - a. Maintenance planning.
  - b. Maintenance Allocation Chart.
  - c. Source, maintenance, and recoverability coding.
  - d. Provisioning parts listings.
  - e. Logistic Support Analysis Record (LSAR).
  - f. Failure Modes, Effects, and Criticality Analysis (FMECA).
  - g. Reliability.

- Block 10, Preparation Instructions (Continued)
  - h. Maintainability.
  - i. Reliability Centered Maintenance (RCM).
- 10.3.14 A description of how the LORA results will be used to influence the system design in the following aspects:
  - a. Modularity.
  - b. Built-in-test.
  - c. Built-in-test equipment.
  - d. Testability.
  - e. Design for discard.
- 10.3.15 A list of the LORA data required to execute the LORA model(s) and the sources to provide that data (i.e., government, contractors, subcontractors, vendors, and test agencies).
- 10.3.16 Discussion of the sensitivity analysis requirements and proposed ranges of particular data elements to quantify the uncertainty of design and program characteristics.